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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/542,346	04/05/2000	Yi-Qun Li	2583.1002-003	6886
21005	7590	02/03/2003	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			PATIDAR, JAY M	
		ART UNIT	PAPER NUMBER	
		2862		

DATE MAILED: 02/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/542,346	LI ET AL.	
	Examiner Jay M. Patidar	Art Unit 2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 20 November 2002.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 3-33 is/are pending in the application.

4a) Of the above claim(s) 15, 16 and 23-29 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) \_\_\_\_\_ is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) 3-14, 17-22 and 30-33 are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

1. This communication is in response to applicant's amendment filed on November 20, 2002.
2. Application now contains distinct inventions due to the amendment to the claims filed on November 20, 2002.
3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 3-5,17, drawn to a multilayered magnetic field sensing device, classified in class 324, subclass 260;
  - II. Claim 6, drawn to a magnetic sensor is supported as a cantilever, classified in class 324, subclass 261;
  - III. Claims 7-8, drawn to a magnetic field sensor with a substrate of magnetostrictive material, classified in class 324, subclass 244;
  - IV. Claims 9-12, drawn to a magnetic field sensor with a substrate of magnetostrictive material and at least one patterned stripe of piezoelectric material, classified in class 324, subclass 260;
  - ✓ V. Claims 13,30,31,32, drawn to a magnetic field sensor with a matrix of magnetostrictive material and at least one rod or fiber of

piezoelectric material surrounded by the matrix, classified in class 324, subclass 260;

- VI. Claims 14,33, drawn to a magnetic field sensor with a matrix of piezoelectric material and at least one rod or fiber of magnetostrictive material surrounding the rod, classified in class 324, subclass 260;
- VII. Claims 18-19, drawn to a magnetic field sensor with one or multi dimensional array of sensor with layers of magnetostrictive material and piezoelectric material, classified in class 324, subclass 244;
- VIII. Claims 20-22, drawn to a magnetic speed detecting system, classified in class 324, subclass 174;

- 4. The inventions are distinct, each from the other because of the following reasons:

Inventions I-VIII are distinct. Inventions are distinct if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation, different functions and different effects.

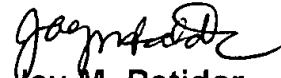
5. Because these inventions are distinct for the reasons given above and the search required for one Group is not required for another group, restriction for examination purposes as indicated is proper.
6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their divergent subject matter or structure, restriction for examination purposes as indicated is proper.
8. A telephone call was made to Mr. Kevin T. Shaughnessy on January 28, 2003 to request an oral election to the above restriction requirement, but did not result in an election being made.
9. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

10. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay M. Patidar whose telephone number is (703) 308-6723. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 5:30 PM.

The fax number for this group is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application should be directed to the Customer Service at (703) 306-3329.

  
Jay M. Patidar  
Primary Examiner  
Tech Center 2862  
January 28, 2003